

CLAIMS

What is claimed is:

1           1.     A system for controlling luminaries from a plurality of different locations  
2     over a digital addressable lighting interface (DALI) control bus, said system comprising:  
3                 a plurality of luminaries connected to a power source and a digital  
4     addressable lighting interface (DALI) control bus;  
5                 a DALI master connected to said DALI control bus;  
6                 a DALI control bus power supply connected to said DALI control bus; and  
7                 at least one DALI sub-master connected to said DALI control bus,  
8     wherein said DALI master and said at least one DALI sub-master control different  
9     ones of said plurality of luminaries.

1           2.     The system of claim 1, wherein said DALI master and said DALI sub-master  
2     are in different locations.

1           3.     The system of claim 2, wherein the different locations are selected from the  
2     group consisting of room, office, conference room, lunch room, coffee bar, bathroom,  
3     laboratory, reception area, closet, storage room, hall and lobby.

1           4.     The system of claim 1, wherein the ones of said plurality of luminaries  
2     controlled by said DALI master and the ones of said plurality of luminaries controlled by  
3     said DALI sub-master are in different locations.

1           5.       The system of claim 4, wherein the different locations are selected from the  
2 group consisting of room, office, conference room, lunch room, coffee bar, bathroom,  
3 laboratory, reception area, closet, storage room, hall and lobby.

1           6.       The system of claim 1, further comprising a computer interface coupled to  
2 said DALI master.

1           7.       The system of claim 8, wherein said computer interface is selected from the  
2 group consisting of RS-232, RS-422 and USB.

1           8.       The system of claim 1, further comprising a computer interface coupled to  
2 said at least one DALI sub-master.

1           9.       The system of claim 8, wherein said computer interface is selected from the  
2 group consisting of RS-232, RS-422 and USB.

1           10.      A method for controlling luminaries from a plurality of different locations  
2 over a digital addressable lighting interface (DALI) control bus, said method comprising  
3 the steps of:

4                   connecting a plurality of luminaries, a DALI master, a DALI control bus  
5 power supply and at least one DALI sub-master to a digital addressable lighting  
6 interface (DALI) control bus;

7                   controlling at least one of said plurality of luminaries with said DALI  
8 master; and

controlling at least one other of said plurality of luminaries with said at least one DALI sub-master.

11. The method of claim 10, wherein said DALI master and said DALI sub-master are in different locations.

12. The method of claim 11, wherein the different locations are selected from the group consisting of room, office, conference room, lunch room, coffee bar, bathroom, laboratory, reception area, closet, storage room, hall and lobby.

13. The method of claim 10, wherein the at least one of said plurality of luminaries controlled by said DALI master and the at least one other of said plurality of luminaries controlled by said DALI sub-master are in different locations.

14. The method of claim 13, wherein the different locations are selected from the group consisting of room, office, conference room, lunch room, coffee bar, bathroom, laboratory, reception area, closet, storage room, hall and lobby.

15. The method of claim 10, further comprising the step of coupling said DALI master to a computer.

16. The method of claim 15, wherein the step of coupling said DALI master to a computer is done with a serial communications interface.

17. The method of claim 16, wherein said serial communications interface is selected from the group consisting of RS-232, RS-422 and USB.

1           18.     The method of claim 10, further comprising the step of coupling said DALI  
2 sub-master to a computer.

1           19.     The method of claim 18, wherein the step of coupling said DALI sub-master  
2 to a computer is done with a serial communications interface.

1           20.     The method of claim 19, wherein said serial communications interface is  
2 selected from the group consisting of RS-232, RS-422 and USB.

1           21.     The system of claim 1, further comprising a command transmission  
2 collision detection circuit and a command retransmission circuit in said DALI master.

1           22.     The system of claim 1, further comprising a command transmission  
2 collision detection circuit and a command retransmission circuit in said DALI sub-  
3 master.

1           23.     The method of claim 10, further comprising the steps of detecting a  
2 transmission collision causing a corrupted command and retransmitting the corrupted  
3 command.

1           24.     An apparatus for controlling luminaries from a plurality of different  
2 locations over a digital addressable lighting interface (DALI) control bus, said system  
3 comprising:

4                   a DALI master having command transmission collision detection and  
5                   command retransmission; and

6 a DALI sub-master having command transmission collision detection and  
7 command retransmission,

8 wherein said DALI master and said DALI sub-master are adapted for  
9 connection to a plurality of luminaries with a DALI control bus.

1 25. The system of claim 1, wherein said plurality of luminaries are selected from  
2 the group consisting of an incandescent light, a fluorescent light, a high pressure gas electric  
3 discharge light, a low pressure gas electric discharge light, light emitting diode light and  
4 electroluminescent light.

1 26. The method of claim 10, wherein said plurality of luminaries are selected  
2 from the group consisting of an incandescent light, a fluorescent light, a high pressure gas  
3 electric discharge light, a low pressure gas electric discharge light, light emitting diode light  
4 and electroluminescent light.

1 27. The apparatus of claim 24, wherein said plurality of luminaries are selected  
2 from the group consisting of an incandescent light, a fluorescent light, a high pressure gas  
3 electric discharge light, a low pressure gas electric discharge light, light emitting diode light  
4 and electroluminescent light.